

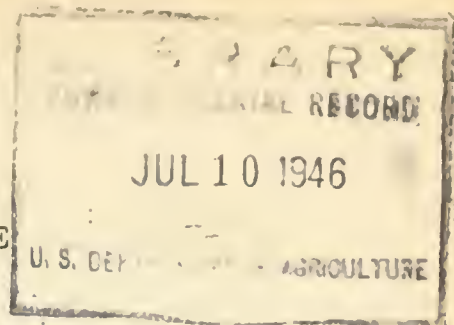
## Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



11367  
F2082  
Cop 2

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL RESEARCH ADMINISTRATION  
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE  
WASHINGTON 25, D. C.



In Cooperation with State, Federal and other Agencies

COTTON INSECT CONDITIONS FOR WEEK ENDING JUNE 29, 1946  
(Fifth Cotton Insect Survey Report for 1946)

The boll weevil situation continues critical. In general, conditions are about as they were during the last week of June in 1945. In some areas the weevils are more numerous than last year and in other areas the infestations are lower. Rains and mild temperatures have been favorable for weevil increase in the Carolinas, Georgia, Alabama, Mississippi, Louisiana and Texas.

If hot, dry weather does not prevail or the heavily infested cotton fields are not properly dusted with calcium arsenate during July, the losses caused by the boll weevil will be serious in many counties in all of those States.

The cotton leafworm has now appeared in Nueces and Aransas Counties. It has previously been reported from Cameron, Jim Wells and Willacy Counties also in southern Texas.

Cotton flea hopper infestations continue high in the Coastal section of Texas. Thus far this season most of the dusting to prevent losses from the boll weevil, flea hopper and other cotton insects has been done in Texas, but some dusting has been done in California, Arizona and Mississippi.

Except for nicotine, no shortage of insecticides generally used on cotton has been reported by cotton growers or insecticide dealers.

BOLL WEEVIL

TEXAS: In the vicinity of Waco in central Texas the boll weevil infestations are much higher than during any recent year. In 36 fields examined the infestations ranged from 48% to 95% punctured squares with an average of 75% in all fields as compared to an average of 23% during the same period in 1945; 42% in 1944; 12% in 1943; 24% in 1942; and 26% in 1941.

In Cameron, Hidalgo and Willacy Counties in the Lower Rio Grande Valley the boll weevil infestations continue low except in a few fields and most of the crop in that region is now too far advanced to be seriously damaged by weevils.

LOUISIANA: Conditions, due to rain and mild temperatures, were favorable for weevil development throughout the week in the northern part of the State.

The average weevil infestation in 95 fields in 8 counties in Louisiana was 35%. In 4% of the fields no punctured squares were found; in 7% the infestation was from 1 to 10%; in 34% from 10 to 25%; in 28% from 26 to 50%; and in 27% over 50%.

Weevils continued to emerge in limited numbers from hibernation cages at Tallulah. The total emergence as of June 28 was 9.22%. This has been exceeded only four times in the past 15 years--in 1945, 1941, 1937 and 1932.

ARKANSAS: Rains and mild temperatures in the southern part of the State were favorable for weevils and crop growth. Cotton in general is still small. Plant examinations made in 29 fields in 4 counties showed an average of 297 weevils per acre. The range was from 0 to 1,116 per acre.

MISSISSIPPI: Weather conditions in general were favorable for weevil development and unfavorable for crop production.

From examinations made in 109 fields in 10 Delta counties, 61 were infested. An average of 15% of the squares were punctured on the infested farms. In 48 of the fields no infestation was found; in 39 the infestations ranged from 1 to 10% punctured squares; in 8 it was from 11 to 25%; in 10 from 26 to 50%; and in 4 fields the infestation was over 50%. The heaviest infestations were found in Warren, Yazoo and Issaquena Counties.

The average infestation 15% punctured squares in the infested fields in the Delta is the same as it was during the last week of June 1945. During this week in 1944 the average infestation in this area was only 10% punctured squares.

FLORIDA: P. W. Calhoun, Florida Experiment Station, Gainesville, Fla., wrote on June 21: "South of here the infestation is generally very light. This is according to expectations, as the acreage last year was small and the plantings this year are in no cases near a planting of last year. At Leesburg in Lake County several careful examinations failed to show any evidence of weevils." Mr. Calhoun also reported that no weevils were found in cotton fields near McIntosh in Marion County, and Evinston in Alachua County. North of Gainesville the weevil population is heavier than usual, the infestations ranging as high as 31% punctured squares, but the usual counts are between 8 and 12%. "Weather conditions in northern Florida favored early emergence and there was not sufficient hot weather during early squaring to reduce emergence from early fallen squares as much as is usually the case. However, we have been having very hot weather during the past week and most of the larvae in squares on the ground are dead. If the present heat wave continues, there will be a good chance to escape heavy weevil damage in northern Florida this year."

GEORGIA: Boll weevil infestations were high and conditions were favorable for weevils and cotton in all 41 counties where field examinations were made in the southern half of the State. Temperatures have not been high enough to check the boll weevils and the present prospect is that weevils will cause serious losses in most of the cotton fields examined if the growers do not make applications of calcium arsenate dust as needed.

SOUTH CAROLINA: The average weevil infestation in 156 fields in 22 counties in the central, southern and eastern part of the State averaged 16.54% punctured squares. Only three of these fields were free of weevils; in 42 fields the infestations were less than 10%; in 85 fields the infestations ranged from 11 to 25%; in 25 fields from 26% to 50%; and in only one field were more than 50% of the squares punctured.



NORTH CAROLINA: Examinations were made in 98 fields in 14 eastern and south-eastern counties with either boll weevils or punctured squares in 71 of the 98 fields. The weevil population averaged 62 per acre in 36 fields, and the square infestation averaged 14.85% in 60 fields. Of the 62 fields with squares only two were free of weevils, 19 other fields had less than 10% punctured squares, while in 33 fields the infestation ranged from 11% to 25%, and in 8 fields more than 25% of the squares were punctured.

#### MISCELLANEOUS INSECTS

BEET ARMYWORM: Damage to cotton from beet armyworms continued to be serious in the Santa Cruz Valley south of Tucson, Arizona, and practically all acreage has been dusted with a 5% DDT-sulfur mixture and some calcium arsenate for their control.

APHIDS: P. W. Calhoun, Gainesville, Florida, reported on June 21: "Aphid infestations appear to be more common and heavier than is usual at this time of the year, but no field was observed in which the damage had become excessive."

Fairly heavy populations of aphids were reported on young cotton in central Texas but no serious damage has been done.

GRASSHOPPERS: Continue abundant in many sections of central Texas and control measures are being used generally for their control.

COTTON INSECTS IN CALIFORNIA: George J. Harrison, Senior Agronomist, U. S. Cotton Field Station, Shafter, California, wrote on June 16: "There was some early dusting of cotton for localized outbreaks of yellow-striped armyworms and for the beet armyworms. Also, there was considerable dusting locally for control of the western flower and onion thrips on cotton. This was all done when cotton was in the early seedling stages, or about the time first true leaves became visible.

"Within the last week or so there has been some DDT applied to cotton in the Wasco area for lygus control, but checking in the area reveals very few lygus bugs in the cotton or in the area. These bugs do not appear to be present in cotton in damaging numbers as yet, but with the second cutting of alfalfa and the nearing completion of the potato harvest, we may expect them to invade the cotton shortly."

"There have been the usual outbreaks of grasshoppers in the same localities as they normally occur, i.e. margins of the desert and permanent pastures, with migration into the cotton as the breeding grounds dry up.

"It now appears that DDT will be used extensively on cotton this year for lygus control and the supply seems adequate."

Gordon L. Smith, Assistant Entomologist, Agricultural Experiment Station, University of California, Berkeley, California, wrote on June 19: "The surveys I have made of cotton this season show that thrips injury was fairly serious throughout the San Joaquin Valley, and the beet armyworm was a serious pest in the Tulare Lake area. The beet armyworm did some damage

to cotton throughout the San Joaquin Valley. Most of the dusting of cotton was in the Tulare Lake area for control of beet armyworms with 5 percent DDT and 85 percent sulfur dust. Good control of the worms was obtained, but very poor control of thrips. Weather conditions for dusting were very poor and also equipment was poor. Reports are that airplane dusting with DDT did not control thrips (onion and western flower thrips).

"The population of Lygus hesperus Knight has been unusually light on alfalfa, potatoes and other host plants in the cotton growing area. This again follows in a year of very light rainfall in that part of the State. Usually only an occasional one was taken in sweeping 200 tops in a field. The "black flea-hopper," Clamydatus associatus was the most common of the plant bugs found, but only 5 - 9 of these per 100 tops and about one-half as many fleahoppers, Psallus seriatus. These we know show up for a short time and may or may not be numerous throughout the season.

"On some sandy land the red spider, Tetranychus atlanticus McG., is present but not seriously injuring cotton."

\*\*\*\*\*

July 3, 1946



